

## AMENDMENT TO THE CLAIMS

*Please amend the claims as follows:*

1. (Currently amended) A vocal training device, comprising:

means for providing three nearly simultaneous tactile biofeedback reference sources,  
said tactile biofeedback means adapted to assist a vocal trainee or user achieve a desired  
vocal output via auditory, visual, and physical biofeedback comparators provided by said  
tactile biofeedback means, said tactile biofeedback means providing for the user's  
recognition of an auditory target pitch, the user's subsequent attempted production of a  
matching vocalized pitch, the user's sensing any discordant biofeedback between said  
auditory target pitch and the user's vocalized pitch as compared via said visual, auditory, and  
tactile biofeedback sources, said means adapted to allow the user to adjust the vocalized pitch  
to match the target pitch by minimizing the discordant biofeedback as accomplished by  
raising or lowering a frequency of the user's pitch until a seemingly corresponding  
diminishment in the user's sensation of said three physical biofeedback comparators is  
achieved.

2. (Original) The vocal training device of Claim 1, further comprising an  
interactive unit adapted to compare and analyze a vocal trainee generated note against a  
target note generated by said interactive unit.

3. (Original) The vocal training device of Claim 2, wherein the vocal trainee  
generated note is conveyed to said interactive unit via a microphone.

4. (Original) The vocal training device of Claim 3, wherein said target note is audibly generated by said interactive unit by selecting a corresponding target note key.

5. (Original) The vocal training device of Claim 4, further comprising means for auditory biofeedback, said auditory biofeedback means adapted to assist the vocal trainee achieve a desired vocal output.

6. (Original) The vocal training device of Claim 5, wherein said auditory biofeedback means is an earpiece.

7. (Original) The vocal training device of Claim 6, wherein audibly generated said target note is conveyed to said earpiece for audible reception and biofeedback to the vocal trainee.

8. (Original) The vocal training device of Claim 7, wherein the vocal trainee generated note is conveyed to said interactive unit, compared and analyzed against said target note, and subsequently looped back to said earpiece for audible reception and biofeedback to the vocal trainee.

9. (Original) The vocal training device of Claim 8, further comprising means for visual biofeedback, said visual biofeedback means adapted to assist the vocal trainee achieve a desired vocal output.

10. (Original) The vocal training device of Claim 9, wherein said visual biofeedback means is a visual graphical interface for visually conveying vocal training information to the vocal trainee.

11. (Original) The vocal training device of Claim 10, wherein said target note is visually generated on said visual graphical interface by said interactive unit by selecting a corresponding target note key.

12. (Original) The vocal training device of Claim 11, wherein visually generated said target note is in Roman alphabet format corresponding to said target note.

13. (Original) The vocal training device of Claim 12, wherein visually generated said target note is in the form of an indicator light corresponding to said target note.

14. (Original) The vocal training device of Claim 13, wherein the vocal trainee generated note is conveyed to said interactive unit, compared and analyzed against said target note, and subsequently displayed in Roman alphabet format on said visual graphical interface for visual comparison of same against said target note also displayed in Roman alphabet format on said visual graphical interface.

15. (Original) The vocal training device of Claim 14, wherein the vocal trainee generated note is conveyed to said interactive unit, compared and analyzed against said target

note, and subsequently displayed as an indicator light on said visual graphical interface for visual comparison of same against said target note also displayed as an indicator light on said visual graphical interface.

16. (Original) The vocal training device of Claim 3, wherein said tactile biofeedback means is a physical vibration sensed by the vocal trainee.

17. (Original) The vocal training device of Claim 16, wherein said tactile biofeedback means is selected from the group consisting of vibrational pads worn against the throat of the vocal trainee, vibrational helmets, vibrational earpiece, vibrational nosepiece, vibrational shoes, vibrational wristband, vibrational vest, vibrational chest piece, vibrational belt, vibrational body suit, vibrational eyewear, vibrational skullcap, vibrational head apparel, vibrational headgear, vibrational forearm unit, vibrational gel floor mat, and combinations thereof.

18. (Original) The vocal training device of Claim 17, wherein said target note is translated into a physical vibration by said interactive unit by selecting a corresponding target note key, and wherein said physical vibration is subsequently conveyed to the vocal trainee for physical or tactile perception of same.

19. (Original) The vocal training device of Claim 18, wherein adjusting the vocal trainee generated note to match said target note, and thus minimize discordance between

same, results in a seemingly corresponding diminishment of said physical vibration sensed by the vocal trainee.

20. (Currently amended) A vocal training device, comprising:

means for tactile biofeedback;

means for auditory biofeedback; and,

means for visual biofeedback,

wherein said tactile biofeedback means, said auditory biofeedback means and said visual biofeedback means are adapted to assist a vocal trainee or user achieve a desired vocal output via auditory, visual, and physical biofeedback comparators provided by said respective tactile biofeedback means, said tactile biofeedback means providing for the user's recognition of an auditory target pitch, the user's subsequent attempted production of a matching vocalized pitch, the user's sensing any discordant biofeedback between said auditory target pitch and the user's vocalized pitch as compared via said visual, auditory, and tactile biofeedback sources, said means adapted to allow the user to adjust the vocalized pitch to match the target pitch by minimizing the discordant biofeedback as accomplished by raising or lowering a frequency of the user's pitch until a seemingly corresponding diminishment in the user's sensation of said three physical biofeedback comparators is achieved.

21. (Original) The vocal training device of Claim 20, further comprising an interactive unit adapted to compare and analyze a vocal trainee generated note against a target note generated by said interactive unit.

22. (Original) The vocal training device of Claim 21, wherein the vocal trainee generated note is conveyed to said interactive unit via a microphone.

23. (Original) The vocal training device of Claim 22, wherein said target note is audibly generated by said interactive unit by selecting a corresponding target note key.

24. (Original) The vocal training device of Claim 23, wherein said auditory biofeedback means is an earpiece.

25. (Original) The vocal training device of Claim 24, wherein audibly generated said target note is conveyed to said earpiece for audible reception and biofeedback to the vocal trainee.

26. (Original) The vocal training device of Claim 25, wherein the vocal trainee generated note is conveyed to said interactive unit, compared and analyzed against said target note, and subsequently looped back to said earpiece for audible reception and biofeedback to the vocal trainee.

27. (Original) The vocal training device of Claim 26, wherein said visual biofeedback means is a visual graphical interface for visually conveying vocal training information to the vocal trainee.

28. (Original) The vocal training device of Claim 27, wherein said target note is further visually generated on said visual graphical interface by said interactive unit by selecting said corresponding target note key.

29. (Original) The vocal training device of Claim 28, wherein the vocal trainee generated note is conveyed to said interactive unit, compared and analyzed against said target note, and subsequently displayed in Roman alphabet format on said visual graphical interface for visual comparison of same against said target note also displayed in Roman alphabet format on said visual graphical interface.

30. (Original) The vocal training device of Claim 29, wherein the vocal trainee generated note is conveyed to said interactive unit, compared and analyzed against said target note, and subsequently displayed as an indicator light on said visual graphical interface for visual comparison of same against said target note also displayed as an indicator light on said visual graphical interface.

31. (Original) The vocal training device of Claim 30, wherein said tactile biofeedback means is a physical vibration sensed by the vocal trainee.

32. (Original) The vocal training device of Claim 31, wherein said tactile biofeedback means is selected from the group consisting of vibrational pads worn against the throat of the vocal trainee, vibrational helmets, vibrational earpiece, vibrational nosepiece, vibrational shoes, vibrational wristband, vibrational vest, vibrational chest piece, vibrational

belt, vibrational body suit, vibrational eyewear, vibrational skullcap, vibrational head apparel, vibrational headgear, vibrational forearm unit, vibrational gel floor mat, and combinations thereof.

33. (Original) The vocal training device of Claim 32, wherein said target note is translated into a physical vibration by said interactive unit by selecting said corresponding target note key, and wherein said physical vibration is subsequently conveyed to the vocal trainee for physical or tactile perception of same.

34. (Original) The vocal training device of Claim 33, wherein adjusting the vocal trainee generated note to match said target note results in harmonization of said target note and the vocal trainee generated note as audibly perceived by the vocal trainee via said earpiece.

35. (Original) The vocal training device of Claim 34, wherein adjusting the vocal trainee generated note to match said target note results in the vocal trainee generated note being reassigned a note value displayed in said Roman alphabet format corresponding to or matching said target note as displayed in said Roman alphabet format on said visual graphical interface.

36. (Original) The vocal training device of Claim 35, wherein adjusting the vocal trainee generated note to match said target note results in the vocal trainee generated note



being reassigned a note value displayed as said indicator light corresponding to or matching said target note as displayed as another said indicator light on said visual graphical interface.

37. (Original) The vocal training device of Claim 35, wherein adjusting the vocal trainee generated note to match said target note results in a corresponding and progressive change in color of said indicator light to match a stagnate color of another said indicator light corresponding to said target note as displayed on said visual graphical interface.

38. (Original) The vocal training device of Claim 35, wherein adjusting the vocal trainee generated note to match said target note results in a corresponding and progressive change in color of a series of indicator lights to match a stagnate color of an indicator light corresponding to said target note as displayed on said visual graphical interface.

39. (Original) The vocal training device of Claim 36, wherein adjusting the vocal trainee generated note to match said target note, and thus minimize discordance between same, results in a seemingly corresponding diminishment of said physical vibration sensed by the vocal trainee.

40. (Original) The vocal training device of Claim 39, further comprising an external speaker system for providing the vocal trainee with additional auditory biofeedback.

41. (Original) The vocal training device of Claim 40, further comprising an means for recoding the vocal trainee's vocal training session for subsequent analysis of same.

42. (Currently amended) A method of vocal training, comprising the steps of:
- a. generating a vocal pitch; and,
  - b. adjusting the vocal pitch to match a target note translated into a sensed biofeedback, said sensed biofeedback ~~selected from the group consisting of~~comprising nearly simultaneous visual biofeedback, auditory biofeedback, and tactile biofeedback, ~~and combinations thereof.~~
43. (Original) A method of vocal training, comprising the steps of:
- a. obtaining a vocal training device, comprising:
    - means for tactile biofeedback;
    - means for auditory biofeedback; and,
    - means for visual biofeedback; and,
  - b. selecting a target note for vocal reproduction;
  - c. generating an auditory pitch corresponding to the pitch of said target note;
  - d. audibly recognizing said auditory pitch via said auditory biofeedback means;
  - e. visually recognizing said auditory pitch via said visual biofeedback means;
  - f. generating a physical vibration corresponding to the frequency of said target note;
  - g. tactilely recognizing said physical vibration via said tactile biofeedback means;
  - h. producing said auditory pitch into a vocalized pitch;

- i. sensing the discordant biofeedback between said auditory pitch and said vocalized pitch via said tactile biofeedback means; and,
- j. adjusting said vocalized pitch to match said auditory pitch by minimizing said discordant biofeedback as recognized by a seemingly corresponding diminishment of said physical vibration.

44. (Currently amended) A vocal training device, comprising:

an earpiece adapted to vibrate upon encounter of user-generated sound waves,

said earpiece providing means for receiving a reference sound wave and a user-generated sound wave, and for vibrating differentially based upon discordance between said reference and user-generated sound waves, thereby providing the user with tactile biofeedback.

45. (Original) The vocal training device of Claim 44, further comprising a main chamber bifurcated by a vibratory membrane.

46. (Original) The vocal training device of Claim 45, wherein a first chamber of said main chamber is adapted to receive and deflect an ambient reference pitch, thereby resulting in vibration of said vibratory membrane.

47. (Original) The vocal training device of Claim 46, wherein a second chamber of said main chamber is adapted to receive the user-generated sound waves for disruption, and thus, further vibration of said vibratory membrane.

48. (Original) The vocal training device of Claim 47, wherein vibrations from said vibratory membrane are channeled into the user's ear canal for tactile reception and sensing of same as tactile biofeedback.

49. (Original) The vocal training device of Claim 48, wherein user sensation of discordant biofeedback between the user-generated sound waves and said ambient reference pitch, as sensed by the user via discordant vibrations delivered via said vibrating vibratory membrane, enables the user to adjust his/her user-generated sound waves in an attempt to minimize the discordant biofeedback as recognized by a seemingly corresponding diminishment of said tactile biofeedback.